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ANNUAL REPORT

OF THE

Medical Officer of Health

TO THE

PORT HEALTH AUTHORITY

1938.



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Port of Manchester Health Authority

Report by the Medical Officer of Health to the
CHAIRMAN AND MEMBERS OF THE PORT HEALTH
AUTHORITY.

I have the honour to present the Annual Report on the work of Port Health Administration in the Port of Manchester for the year 1938 in accordance with Article 17 (5) of the Sanitary Officers (Outside London) Regulations, 1936.

This report is presented in the form desired by the Minister of Health and the statistical information is arranged in the form and sequence indicated in the Appendix to Memo. 174/SA. of the Ministry dated 30th December, 1933.

E. H. WALKER,

Medical Officer of Health.

The membership of the Authority for the year was as follows :—
 Alderman Sir Thomas Robinson, Kt., K.B.E., J.P., Borough of Stretford,
 (Chairman).

| | | |
|---------------------------------|---|---------------------------|
| Alderman J. Elliot | } | Manchester. |
| succeeded in October, 1938 | | |
| by Councillor J. Owen ... | | |
| Alderman T. H. Hinchcliffe ... | | |
| Alderman G. Hall | | |
| Councillor P. Hallows ... | } | Salford. |
| succeeded in October, 1938 | | |
| by Councillor J. H. Meachin | | |
| Councillor W. W. Crabtree ... | | |
| Councillor S. W. Davis ... | | |
| succeeded in October, 1938 | } | Borough of Eccles. |
| by Councillor G. H. Goulden | | |
| Councillor R. Headon ... | | |
| succeeded in October, 1938 | | |
| by Alderman W. S. Roberts | | |
| Councillor F. Morris | } | Irlam U.D. |
| succeeded in October, 1938 | | |
| by Councillor J. Clark ... | | |
| Councillor T. E. Collyer ... | | |
| succeeded in March, 1938, | | |
| by Councillor W. Hughes ... | } | Urmston U.D. |
| Councillor T. Ashley, J.P. ... | | |
| Alderman J. Poole | | |
| succeeded in December, 1938 | | |
| by Councillor R. Done ... | | |
| Alderman G. H. Davies, J.P. ... | } | Lymm U.D. Runcorn U.D. |
| | | |
| | | |
| | } | Runcorn R.D. Bucklow R.D. |
| | | |
| | | |
| | } | Warrington C.B. and R.D. |
| | | |
| | | |
| | } | Borough of Widnes. |
| | | |
| | | |
| | } | Borough of Bebbington. |
| | | |
| | | |
| | } | Ellesmere Port U.D. |
| | | |
| | | |

Officials of the Authority :—

Clerk to the Authority : A. H. Flint, Solicitor, Bexley Square, Salford, 3.
 Telephone : BLAckfriars 9214.

Medical Officer of Health : E. H. Walker, M.B., D.P.H.
 Telephones : Office, TRAfford Park 1714. Residence, LONGford 1700.
 Telegrams : "Portelth," Manchester.

Deputy Medical Officer of Health : V. Newton, M.R.C.S., D.P.H.
 Telephone : BLAckfriars 7852.

Sanitary Inspectors and Deratisation Officers :

W. Richmond, Certified Sanitary Inspector.

W. Schofield, Master Mariner.

W. H. Jennings, Certified Sanitary Inspector. Certified Meat and Food Inspector.

Food Inspectors :

J. Almond, Certified Sanitary Inspector. Certified Meat and Food Inspector.

Geo. Whalley, Certified Sanitary Inspector. Certified Meat and Food Inspector.

Medical Officer's Clerk : J. B. O'Malley, T. A. Buckley.

Ratcatcher : J. Richards.

Offices : 168, Trafford Road, Salford, 5 ; Telephone : TRAfford Park 1714.
 "Westholm," Westfield Road, Runcorn ; Telephone : Runcorn 2446.

1. Amount of Shipping Entering the Port during the Year 1938.

TABLE A.

| | Number | Tonnage | Number inspected | | Number reported to be defective | Number of vessels on which defects were remedied | Number of vessels reported as having or having had, during the voyage infectious disease on board |
|---|--------|-----------|------------------------|---------------------------|---------------------------------|--|---|
| | | | By the Medical Officer | By the Sanitary Inspector | | | |
| Foreign { Steamers..... † Motor Vessels Sailing Vessels | 1,417 | 1,947,076 | } 97 | 1,437 | 307 | 151 | 19 |
| | 282 | 886,462 | | — | — | — | — |
| | — | — | | — | — | — | — |
| Total Foreign | 1,699 | 2,833,538 | 97 | 1,437 | 307 | 151 | 19 |
| Coastwise† { Steamers..... Motor Vessels Sailing Vessels | 1,284 | 602,826 | — | } 747 | 276 | 161 | — |
| | 208 | 92,346 | — | | 17 | 5 | — |
| | 4 | 368 | — | | 56* | — | — |
| Total Coastwise | 1,496 | 695,540 | — | 803 | 293 | 166 | — |
| Total Foreign and Coastwise | 3,195 | 3,529,078 | 97 | 2,240 | 600 | 317 | 19 |

† Includes mechanically propelled vessels other than steamers.
 * Includes flats and barges.

This Table is compiled from information kindly supplied by H.M. Collector of Customs.

II.—CHARACTER OF TRADE OF PORT.

- (A) Passenger Traffic during 1938 : **Nil.**
- (B) Cargo Traffic. Principal Imports. Principal Exports.
- (C) List of Foreign Ports trading regularly with the Port of Manchester, together with Chief Imports and Exports.

The list of Principal Imports and Exports and of Foreign Ports trading regularly with the Port of Manchester has been given in previous Reports. There has been no change during the year 1938 in the character of either the coastwise traffic or the foreign traffic.

III.—SOURCE OF WATER SUPPLY.

(From information kindly supplied by the Traffic Superintendent of the Manchester Ship Canal Company).

- (a) For the Port.
- (b) For Shipping.

Fresh water can be obtained by vessels at the Manchester Docks, at various wharves between Mode Wheel and Barton, Partington Coal Basin, Latchford Locks, Warrington Lay-Bye, Runcorn Lay-Bye, Runcorn Docks, Weston Point Docks, Stanlow Lay-Bye, Stanlow Oil Dock, Ellesmere Port Docks, and Eastham Locks, the sources of supply being from Corporation etc., mains as detailed in previous reports.

- (c) Number of water boats : Nil.

IV.—PORT SANITARY REGULATIONS, 1933.

The Port Sanitary Regulations, 1933, which came into operation on the 1st May, 1933, replace all the previous general and special Regulations (1907 to 1926) dealing with Cholera, Plague and Yellow Fever.

The main provisions of the Regulations and the arrangements made to carry out the Authority's obligations thereunder were fully detailed in the Annual Report for the year 1933.

Treatment of Venereal Disease.

The only information available as to the treatment of seamen in the Port suffering from Venereal disease is that supplied by the Medical Officer of the Salford Municipal Centre, which is the nearest Treatment Centre to the Docks.

| | | | | | | | British Seamen | Foreign Seamen |
|----|--|-----|-----|-----|-----|-----|-------------------|-------------------|
| A. | Patients with | | | | | | | |
| | Syphilis | ... | ... | ... | ... | ... | 5 | 5 |
| | Soft Chancre | ... | ... | ... | ... | ... | 6 | 7 |
| | Gonorrhoea | ... | ... | ... | ... | ... | 15 | 14 |
| | Conditions other than Venereal | ... | ... | ... | ... | ... | 28 | 34 |
| | | | | | | | — | — |
| | Total | ... | ... | ... | ... | ... | 54 | 60 |
| | | | | | | | — | — |
| B. | Total number of Attendances of patients | ... | | | | ... | 867 | 298 |
| C. | Aggregate number of " in-patients " days | ... | | | | ... | 134 | — |

Number of crews of various Nationalities on vessels inspected during the year :—

British—

| | | | | | |
|-----------------|-----|-----|-----|-----|--------|
| Europeans ... | ... | ... | ... | ... | 28,363 |
| Lascars ... | ... | ... | ... | ... | 4,001 |
| Chinese ... | ... | ... | ... | ... | 396 |
| | | | | | <hr/> |
| | | | | | 32,760 |
| | | | | | |
| American (U.S.) | ... | ... | ... | ... | 5,049 |
| Belgian ... | ... | ... | ... | ... | 214 |
| Danish ... | ... | ... | ... | ... | 2,000 |
| Dutch ... | ... | ... | ... | ... | 1,055 |
| Egyptian | ... | ... | ... | ... | 112 |
| Esthonian | ... | ... | ... | ... | 218 |
| Finnish ... | ... | ... | ... | ... | 1,531 |
| French ... | ... | ... | ... | ... | 125 |
| German ... | ... | ... | ... | ... | 1,261 |
| Greek ... | ... | ... | ... | ... | 456 |
| Hungarian | ... | ... | ... | ... | 35 |
| Italian ... | ... | ... | ... | ... | 28 |
| Jugo-Slav | ... | ... | ... | ... | 52 |
| Latvian ... | ... | ... | ... | ... | 412 |
| Lithuanian | ... | ... | ... | ... | 55 |
| Norwegian | ... | ... | ... | ... | 5,230 |
| Panamanian | ... | ... | ... | ... | 49 |
| Polish ... | ... | ... | ... | ... | 44 |
| Roumanian | ... | ... | ... | ... | 66 |
| Russian ... | ... | ... | ... | ... | 235 |
| Swedish ... | ... | ... | ... | ... | 2,310 |
| | | | | | <hr/> |
| Total | ... | ... | ... | ... | 53,297 |

TABLE C.

Cases of Infectious Sickness on Vessels in the Port.

| Disease | | No. of Cases during 1938 | | | | No. of vessels concerned | Average No. of cases for previous 5 years | | |
|----------------|-----|--------------------------|-----|------|-----|--------------------------|---|-----|-----|
| | | Passengers | | Crew | | | | | |
| *Pneumonia | ... | ... | — | 1 | ... | 1 | ... | 1.6 | |
| †Malaria | ... | ... | ... | — | 2 | ... | 2 | ... | 0.6 |
| ‡Tuberculosis | ... | ... | ... | — | 2 | ... | 2 | ... | 1.0 |
| „Typhoid Fever | ... | ... | ... | — | 1 | ... | 1 | ... | 0.0 |

* Removed to Park Hospital, Davyhulme.

† One case removed to Ladywell Sanatorium, and the other sent home to Gateshead for hospital treatment.

‡ One case sent home to Norway for treatment, and the other sent home to South Wales for treatment.

„ Removed to Ladywell Sanatorium.

TABLE D.

Cases of Infectious Sickness Occurring on Vessels during the Voyage but disposed of Prior to Arrival in Manchester.

| Disease | | | | | | No. of Cases during 1938 | | No. of vessels concerned | |
|-----------------------|-----|-----|-----|-----|-----|--------------------------|------|--------------------------|---|
| | | | | | | Passengers | Crew | | |
| Diphtheria | ... | ... | ... | ... | ... | 1 | — | ... | 1 |
| Erysipelas | ... | ... | ... | ... | ... | — | 1 | ... | 1 |
| German Measles | | ... | ... | ... | ... | — | 1 | ... | 1 |
| Malaria | ... | ... | ... | ... | ... | — | 1 | ... | 1 |
| Pneumonia... | ... | ... | ... | ... | ... | — | 4 | ... | 4 |
| Smallpox | ... | ... | ... | ... | ... | — | 1 | ... | 1 |
| Tuberculosis | ... | ... | ... | ... | ... | — | 2 | ... | 2 |
| Tubercular Meningitis | | ... | ... | ... | ... | — | 1 | ... | 1 |
| Typhoid Fever | | ... | ... | ... | ... | — | 1 | ... | 1 |

Details of these cases are given on page 10.

No case of plague, cholera, yellow fever or typhus fever occurred and no plague-infected rats were found on vessels within the Port during 1938. No severe outbreak of malaria occurred on any vessel arriving in the Port during the year.

The following information was elicited as to cases of infectious sickness occurring on Manchester-bound vessels during the year.

DIPHTHERIA.

One case was reported; removed to hospital at Marseilles.

ERYSIPELAS.

One case was reported, removed to hospital at St. Kitts, West Indies.

GERMAN MEASLES.

One case was reported, put into hospital at Liverpool.

MALARIA.

One case was reported, removed to hospital at London.

PNEUMONIA.

Four cases were reported. One patient was put into hospital at Colombo, where he died. The other three were sent to hospital at Kemble, Buenos Aires and Philadelphia respectively.

SMALLPOX.

One modified case was reported, removed to hospital at Aden.

TUBERCULOSIS.

Two cases were reported, one was put into hospital at Durban, and the other was sent home from Baltimore.

TYPHOID FEVER.

One case was reported, sent to hospital at Liverpool.

TUBERCULOUS MENINGITIS.

One case was reported, the patient being admitted to hospital at Liverpool where he died.

THE DANGEROUS DRUGS (No. 3) REGULATION, 1923.

No Certificates were issued under these regulations during the year.

V.—MEASURES AGAINST RODENTS.

Measures have been taken under each of the following headings on the lines detailed in the reports for the years 1933 and 1934.

1. For detection of rodent plague :—
 - (a) In ships in the Port.
 - (b) On quays, wharves, warehouses, etc., in the vicinity of the port.
2. To prevent the passage of rats between ships and the shore.
4. Deratisation of
 - (a) Ships.
 - (b) Premises in the vicinity of docks or quays.
4. The detection of rat prevalence in ships and on shore.
5. Rat-proofing.
 - (a) Docks, wharves, warehouses, etc. :—
The Authority has no jurisdiction over shore premises.
 - (b) In ships.

Table “ E ” on page 14 gives monthly details of rats destroyed. The number of rats under the heading “ Unclassified ” comprise those destroyed by fumigation.

During the year there was a decrease in the number of rats destroyed on shipboard. The total number obtained from ships was 1,720 as against 2,596 in 1937 and 1,916 in 1936.

From Dock premises the number obtained by the ratcatcher employed by the Manchester Ship Canal Company was 2,615.

On vessels in docks, trapping accounted for 1,326, of which number 253 were from ships arriving from Infected Ports. 394 were destroyed as a result of the 19 fumigations carried out during the year, as compared with 701 rats destroyed by 12 fumigations in 1937.

The Inspectors have reported evidence of infestation on nine vessels during the year. There were 1,577 special “rat inspections” made during the year, 417 by Inspector Richmond at places towards the Liverpool end of the Port, and 1,160 by the Inspectors at the Manchester end.

Ships found without ratguards in position were 422. In addition, 651 re-visits were made to note if and in what manner instruction had been carried out.

RATCATCHER'S WORK.

The Authority's ratcatcher is employed in searching vessels for evidence of rodents, and in estimating the number of rats present on each vessel. All rats caught are destroyed and specimens are regularly submitted to the Public Health Laboratory for examination. 72 rats were submitted for examination during the year.

Cage traps only are used, and were laid on 435 vessels during the year. Daily visits were made and the following results were obtained :—

| | | | | | | | | |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|----------------------|
| | | | | | | | | <i>Rats trapped.</i> |
| Grey | ... | ... | ... | ... | ... | ... | ... | 316 |
| Brown | ... | ... | ... | ... | ... | ... | ... | 171 |
| Black | ... | ... | ... | ... | ... | ... | ... | 360 |
| | | | | | | | | <hr/> |
| Total | ... | ... | ... | ... | ... | ... | ... | 847 |
| | | | | | | | | <hr/> |
| Vessels visited | ... | ... | ... | ... | ... | ... | ... | 612 |
| Re-visits paid | ... | ... | ... | ... | ... | ... | ... | 1,343 |
| | | | | | | | | <hr/> |
| Total visits and re-visits | | | ... | ... | ... | ... | ... | 1,955 |

PRIVATE RATCATCHERS EMPLOYED.

Manchester Liners, Ltd., Prince Line, Ltd., and T. & J. Harrison, owners of vessels which regularly visit this port, employ private ratcatchers, who lay traps and poison baits during the vessels' stay in Manchester. The following results are reported for 1938 :—

| Company | No. of Rats | Ratcatchers |
|-------------------------|-------------|------------------|
| Manchester Liners, Ltd. | 477 | Mr. F. E. Cox. |
| Prince Line, Ltd. | 2 | Messrs. Zeba Co. |
| T. & J. Harrison | 0 | Messrs. Zeba Co. |

All the vessels of these Companies afford examples of effective effort to reduce the rat population to a minimum, and splendid co-operation exists in the matter of rat destruction.

SPECIAL ATTENTION TO SHIPS FROM INFECTED PORTS.

Careful enquiries are made by the Inspectors, who give detailed directions as to the measures to be taken to prevent passage of rodents between ships and shore and the ratcatcher attends daily on each vessel coming from an infected port.

RATS DESTROYED DURING 1938.

Table E.—(1) On Vessels.

| Number of | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total in year |
|---------------------------|------|------|------|-------|-----|------|------|------|-------|------|------|------|------------------|
| Black Rats | 25 | 23 | 85 | 10 | 18 | 7 | 1 | 15 | 39 | 14 | 63 | 60 | 360 |
| Brown Rats | 8 | 13 | 10 | 9 | 5 | 43 | 52 | 25 | — | 6 | — | — | 171 |
| Grey Rats | 73 | 56 | 53 | 30 | 41 | 8 | 2 | 11 | 30 | 1 | 7 | 4 | 316 |
| *Unclassified Rats | — | — | — | — | 23 | 130 | — | 111 | 14 | 6 | 19 | 91 | 394 |
| Rats Examined | — | 9 | 4 | 4 | 3 | 3 | — | — | 1 | 1 | 1 | — | 26 |
| Rats Infected with Plague | — | — | — | — | — | — | — | — | — | — | — | — | — |
| | | | | | | | | | | | | | 14 |

*After fumigations.

Table F.—(2) In Docks, Quays, Wharves and Warehouses.

| Number of Rats | Jan. | Feb. | Mar. | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total in year |
|----------------------|------|------|------|-------|-----|------|------|------|-------|------|------|------|------------------|
| Species not recorded | 233 | 191 | 235 | 292 | 285 | 356 | 265 | 261 | 245 | 273 | 285 | 267 | 3188† |
| Examined | 4 | 3 | 2 | 9 | 4 | 4 | 1 | 4 | 2 | 4 | 7 | 2 | 46 |
| Infected with plague | — | — | — | — | — | — | — | — | — | — | — | — | — |

† Includes 573 rats caught by the Authority's Ratcatcher.

INFESTED SHIPS WITH VALID CERTIFICATES.

Of the nine vessels found to be heavily or moderately infested, eight were in possession of valid certificates and in one case the certificate was unobtainable. Three of these vessels arrived from infected ports.

| Number | Date of Inspection | Particulars of Current Certificate | Rats trapped in Manchester |
|----------------------------|--------------------|--|----------------------------|
| From Infected Ports :— | | | |
| 1 | 3-2-38 | 24th October, 1937. Deratisation by fumigation. 12 Rats. | 31 |
| 2 | 27-6-38 | 2nd March, 1938. Deratisation by fumigation. 30 Rats. | 46 |
| 3 | 9-12-38 | 21st August, 1938. Deratisation by fumigation. No Rats. | 60 |
| From Non-Infected Ports :— | | | |
| 4 | 31-1-38 | 1st September, 1937. Deratisation by fumigation. 191 Rats. | 77 |
| 5 | 18-2-38 | 16th November, 1937. Exemption Certificate. | 44 |
| 6 | 26-3-38 | 21st November, 1937. Deratisation by fumigation. 72 Rats. | 121 |
| 7 | 25-4-38 | Certificate unobtainable for Inspection. | 38 |
| 8 | 19-9-38 | 3rd May, 1938. Exemption Certificate. | 35 |
| 9 | 2-11-38 | 24th May, 1938. Deratisation by fumigation. 23 Rats. | 37 |

Table G.—Particulars relating to Plague “Infected” or “Suspected” Vessels or Vessels from Plague Infected Ports arriving in the Port during 1938.

| Total Number of such Vessels arriving | Number of such Vessels fumigated by SO ₂ | Number of Rats killed | Number of such Vessels fumigated by HCN | Number of Rats killed | Number of such Vessels on which trapping, poisoning, etc., were employed | Number of Rats killed | Number of such Vessels on which measures of Rat Destruction were not carried out |
|---------------------------------------|---|-----------------------|---|-----------------------|--|-----------------------|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 88 | 5 | 32 | 2 | 2 | 72 | 253 | *16 |

*(Col. 8.—These are Oil Tankers and Boats carrying Ore Cargoes, with no evidence of rat infestation).

Table H.—Deratisation Certificates and Deratisation Exemption Certificates issued during the Year.

| Net Tonnage | No. of Ships | No. of Deratisation Certificates Issued | | | | | No. of Deratisation Exemption Certificates Issued | Total Certificates Issued |
|-------------------------------|--------------|---|---------|-----------------|--------------------------------|-------|---|---------------------------|
| | | *After Fumigation with | | HCN and Sulphur | After Trapping Poisoning, etc. | Total | | |
| | | HCN | Sulphur | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Ships up to 300 tons | 13 | — | — | — | — | — | 13 | 13 |
| " from 301 tons to 1,000 tons | 55 | — | — | — | — | — | 55 | 55 |
| " 1,001 " 3,000 " | 44 | 1 | 5 | — | — | 6 | 38 | 44 |
| " 3,001 " 10,000 " | 79 | 10 | 2 | — | 1 | 13 | 66 | 79 |
| " over 10,000 tons | — | — | — | — | — | — | — | — |
| Totals | 191 | 11 | 7 | — | 1 | 19 | 172 | 191 |

Total number of vessels on which measures of trapping, poisoning, etc., were employed, 535.
 * Prior to fumigation each of these vessels was subjected to trapping.

ALL VESSELS FROM "INFECTED" PORTS.

Results of Visits by Ratcatcher.

| Name of Country and Port from which Vessels proceeded to Manchester | Number of Vessels | Remarks |
|---|-------------------------|-----------------------------------|
| Argentina : | | |
| Buenos Aires } | 13 | 146 Rats caught. |
| Rosario } | | |
| River Plate Ports } | | |
| Egypt, etc. : | | |
| Alexandria } | 30 | 45 Rats caught. |
| Beyrout, etc. } | | |
| Africa : | | |
| Dakar | 15 | 12 Rats caught. |
| India : | | |
| Karachi, Calcutta | 4 | No Rats caught. |
| Greece : | | |
| Grecian Ports | 5 | 21 Rats caught. |
| Peru and Guayaquil : | | |
| Peruvian Ports | 10 | { Oil Tankers. No Rats caught. |
| Roumania : | | |
| Braila, etc. | 5 | 29 Rats caught. |
| Russia : | | |
| Leningrad | 6 | No Rats caught. |
| Totals | 88 | 253 Rats caught. |

137 rats were caught on three of the vessels from infected ports with valid certificates (see page 15).

Only 116 rats were caught on the remaining 85 vessels from infected ports, which is partly explained by the cargoes carried (oil, ore, etc.), but is also an indication of the success of the measures adopted in all ports to secure reduction in rat infestation of ships.

It is satisfactory to note that of the 88 vessels from infected ports, 16 afforded no evidence of the need for measures of rat destruction (Table G.).

The figures in Table H are also significant. Of 191 ships applying for renewal of certificate, it was possible to issue Deratisation *Exemption* Certificates in 172 instances.

Deratisation Certificates were issued in respect of 19 vessels, only 14 of which were so heavily infested as to require fumigation. In four other cases, fumigation was ordered voluntarily by the owners, and in one instance deratisation by trapping only was required.

Explanatory notes on Tables G and H :—

Deratisation Certificates were issued after fumigation in the seven cases included in Table G (Column 2 and Column 4). These seven Certificates are also included in the totals in Table H.

The vessels referred to in Columns 2 and 4 of Table G are also included in the number 72 shown in Column 6 of the same Table, having been visited daily by the Authority's ratcatcher prior to fumigation.

Column 3 of Table G relates to rats killed by fumigation on the vessels referred to in Column 2 of that Table ; and Column 5 relates to rats killed by fumigation on the vessels referred to in Column 4 of the same Table.

The 253 rats killed, recorded in Column 7, includes rats caught by traps on the vessels referred to in Columns 2, 4 and 6, in addition to the 34 rats killed on the same vessels by fumigation (Columns 3 and 5).

VI.—HYGIENE OF CREWS' SPACES.

Table J.

Classification of Nuisances.

| Nationality | Number inspected during 1938 | Defects of original construction | Structural defects through wear and tear | Dirt, vermin and other conditions prejudicial to health | Structural Alterations |
|---------------|------------------------------|----------------------------------|--|---|------------------------|
| British ... | 1,366* | 56 | 376 | 238 | 15 |
| Other Nations | 818 | 31 | 103 | 77 | 12 |

* Does not include flats and barges.

OBSERVATIONS OF THE SANITARY INSPECTORS.

MERCHANT SHIPPING.

Though the crews' accommodation on new British ships and on ships that have had their crews' quarters re-modelled, have improved greatly, there are still three points to which attention of the Authorities should be directed. Firstly, the question of storage of fresh water ; second, the position of the galley on cargo vessels ; and third the care and maintenance of the crews' quarters.

No mention is made in the Merchant Shipping Acts with regard to fresh water on a vessel other than the personal allowance per day. Nothing is said as to how much drinking water a vessel shall carry, where it shall be carried or how, consequently much is left to chance, and this is the most essential and the least expensive commodity on a ship.

Galleys are frequently situated on the fore end of the fiddly casing, with forward bulkhead fitted with barred windows opening on to two side pocket bunker hatches, and the skylight, when opened, receives a full share of smoke, fumes and heavy dust rising from the stokehold. Under these conditions it is impossible for a cook to keep the food or the galley in a reasonably clean condition, when the place is flanked on all sides by so much grime. This is not to mention that in the case of ships trading in the tropics, the heat from the stokehold adds to the discomfort of the atmospheric conditions. Though it is realised the most convenient place for a galley is amidships, a good deal of the trouble might be avoided by arranging this important part of the accommodation on the after part of the midships section of the ship.

During the past year there has still been little or no evidence of attempt to introduce systematic action, agreed upon by all concerned, for the care and maintenance of crews' quarters, and their general cleanliness. It should be readily appreciated that it would be to the owners' interest, as well as the advantage of the crews', that something proper should be done to protect the accommodation by a definite under standing and allocation of responsibility, instead of the usual system, perhaps cleaning every Saturday morning.

W. SCHOFIELD.

CREW ACCOMMODATION.

The year under review saw the advent of new vessels possessing the standard of accommodation required by the Board of Trade as from October, 1937. Although many existing ships possessed similar amenities, the provision is now obligatory and not voluntary.

The improvements will undoubtedly give satisfaction to all concerned, but naturally overshadow the problem of existing ships with less satisfactory accommodation. It would obviously be impossible to deal en masse with existing vessels, and the Board of Trade may only require change over to modern standard when a big alteration or repair is taking place. A large measure of good can be and is being achieved by rearrangement and minor alterations. Such details as rearrangement of rooms, bunks and fittings may effect a vast improvement, as may also the substitution of pedestal W.C.'s for the old type trough closets. Provision of lockers is another desirable improvement which should be easily possible, and removal of harbourage for vermin would also effect a commendable alteration.

Instances of such improvements as these have been noted when making inspections of both deep-water and coasting vessels.

Although it is realised that any dealing with existing vessels must be of quite a voluntary character, many shipowners have willingly co-operated and complied with requests for these improvements made by the Board of Trade and Port Health Authorities.

W. H. JENNINGS.

Particulars of the defective conditions tabulated in Table J are detailed below. No difficulty is experienced in securing the appropriate remedy for unsatisfactory conditions due to natural wear and tear.

| | British | | | Foreign |
|--|----------------|--------------------|-------------------|----------------|
| | Steam Ships | Sailing Vessels | Flats & Barges | Steam Ships |
| CREW'S QUARTERS. | | | | |
| Accumulations of stagnant water in quarters | 5 | — | — | 1 |
| Bulkheads defective, allowing com- munication between W.C.'s, hold, etc., and quarters ... | 20 | — | — | 27 |
| Chain locker casings, broken and defective | 7 | — | 1 | 3 |
| Condensed moisture forming on decks, etc. | 2 | — | — | 1 |
| Decklights, portlights, etc. broken and defective | 80 | — | 3 | 15 |
| Forecastles, etc., requiring cleans- ing, painting, limewashing, etc. | 89 | — | 3 | 12 |
| Forecastles, etc., infested with vermin | 93 | — | 2 | 44 |
| Forecastles, etc., deficient in lighting | 4 | — | — | 2 |
| Forecastle overheated from boiler space | 2 | — | — | — |
| Flooring, fittings, etc., defective | 12 | — | — | 3 |

| | British | | | Foreign |
|--|----------------|--------------------|-------------------|----------------|
| | Steam Ships | Sailing Vessels | Flats & Barges | Steam Ships |
| Hawse pipes defective | 37 | — | — | 10 |
| Miscellaneous leakages into quarters | 22 | — | — | 1 |
| Overhead deck in a decayed or leaky condition | 59 | — | 2 | 23 |
| Ship's gear, stores, etc., kept openly in or in communication with quarters | 3 | — | 1 | 1 |
| Ventilation inefficient or ventila- tors defective | 38 | — | 6 | 38 |
| Uncapped air pipe to ballast tank opening and terminating in forecastle | 3 | — | — | — |
| CONDITION OF DECKS. | | | | |
| Accumulation of dirt and refuse about the decks | 11 | — | — | 5 |
| HEATING. | | | | |
| Stove and stove pipes defective... | 33 | — | 1 | 3 |
| Radiators defective and leaky ... | 11 | — | — | 1 |
| No stove or stove pipe provided | 12 | — | — | — |

| | British | | | Foreign |
|---|----------------|--------------------|-------------------|----------------|
| | Steam Ships | Sailing Vessels | Flats & Barges | Steam Ships |
| OVERCROWDING and uncertified accommodation occupied ... | 16 | — | 1 | 3 |
| STORAGE OF FOOD. | | | | |
| Provision storeroom infested with vermin | 2 | — | — | 1 |
| Lockers require repairing ... | 6 | — | — | — |
| Lockers not ventilated | 3 | — | — | — |
| STORAGE OF WATER. | | | | |
| Water tanks, etc., requiring cleansing | 8 | — | — | 4 |
| Water Tank not provided with drainage plug | 4 | — | — | — |
| Water tanks not provided with a proper cover, casks in a decayed condition, etc. | 21 | — | 4 | — |
| WATER CLOSETS, ETC. | | | | |
| Flushing apparatus defective ... | 20 | — | — | 7 |
| Flush and soil pipes defective ... | 13 | — | — | 2 |
| Pans, urinals, etc., in a foul or defective condition | 11 | — | — | 5 |
| Closet requiring cleansing and painting | 4 | — | — | 3 |

| | British | | | Foreign |
|---|----------------|--------------------|-------------------|----------------|
| | Steam Ships | Sailing Vessels | Flats & Barges | Steam Ships |
| Stagnant water in wash place ... | 8 | — | — | 3 |
| Closet doors and seats absent or requiring repairs | 19 | — | — | 3 |
| Closets deficient in light or ven- tilation or both | — | — | 1 | 2 |
| No air pipe provided to W.C. soil pipe | 6 | — | — | — |
| Waste pipes in leaky condition ... | 1 | — | — | — |
| Totals | 685 | — | 25 | 223 |

NUMBER OF INDIVIDUAL VESSELS INSPECTED.

| Nationality | Individual Number of Vessels Inspected during 1938 | Number of Inspec- tions made | Vessels on which defects were found | Defects remedied during the year | Vessels on which defects reported prior to 1938 were remedied |
|-------------------|--|--|--|--|---|
| British | 600 | 1,366 | 290 | 165 | 86 |
| Other Nations ... | 410 | 818 | 131 | 31 | 35 |

VERMINOUS QUARTERS.

At the Latchford-Eastham end of the Canal, 101 vessels, and at the Manchester end of the Port, 38 vessels were found to be infested with vermin.

Of the 101 ships found infested at the Latchford section, 36 were small coasting type vessels, and the remainder were oil-tankers and tramp steamers. In the experience of your Inspectors, infestation is more frequently seen in the smaller classes than in the larger types of vessel.

One hundred and thirty nine inspections were made during the year, of vermin-infested vessels, comprising :—

95 British Steamships.

44 Foreign Steamships.

139

This total 139 includes some vessels which made more than one voyage to this Port during the year, and were found to be infested on more than one occasion. One hundred and fourteen individual vessels inspected during the year were found to be infested. Vessels with vermin were thus found at 6.2 per cent. of the total inspections (2,240 recorded.)

| | Manchester Section | Latchford-Eastham Section |
|--|-----------------------|------------------------------|
| Vessels found to be infested ... | 38 | 101 |
| Still infested on re-inspection at a later visit | — | 18 |

STATUTORY NOTICES.

During the year one statutory notice under the provisions of the Public Health Act, 1875, was served on the owners of a vessel in respect of the defective conditions found. Attention had previously been drawn to the defects named, but without result.

| Vessel | Defects | Remarks |
|----------------------------|---|-------------------------------|
| Canal Boat "Lauderdale" | Port side of cabin in defective condition 12/9/38 | Reported Remedied 18/10/38 |

PARROTS (PROHIBITION OF IMPORT) REGULATIONS, 1930.

During the year 21 certificates for the re-exportation of 33 birds were issued under the above Regulations. 8 birds were destroyed on board various vessels.

I wish to place on record my appreciation of the services of the staff of the Manchester Ship Canal Co. The relations between the Company's servants and the Authority's staff are most cordial, and any request for assistance has been cheerfully and readily rendered. From the management to the dockers, everyone has co-operated to facilitate and expediate the work of your inspectors. Their assistance is greatly appreciated as an important contribution to efficiency.

DEFECTS OF ORIGINAL CONSTRUCTION.

The following is a tabulation of the defects classed as "defects of original construction" found on the vessels inspected during 1938.

| | British | Foreign |
|--|---------|---------|
| Flushing apparatus to W.C. inefficient | — | 1 |
| Forecastle overheated from boiler space | 2 | — |
| Ventilators over bunks and not provided with wind shutes, etc. | 27 | 28 |
| No bed-berth provided | 2 | — |
| Food lockers not ventilated | 3 | — |
| Stoves not provided | 12 | — |
| Defective oil lamps in forecastle | 1 | — |
| Forecastles in communication with W.C.'s owing to defective bulkheads and drainage | — | 1 |
| No air pipes to W.C. soil pipes | 6 | — |
| W.C. insufficient in light and ventilation | — | 1 |
| No means of drainage provided to W.C.'s | 3 | — |
| Totals | 56 | 31 |

From the above classification it will be seen that the majority of the defects of original construction discovered were faults in ventilation, and could have easily been avoided before the vessels were put into commission.

The attention of the Principal Officer of the Board of Trade, Liverpool, is directed to all defects on original construction on British vessels, and he has been most helpful by his advice and assistance.

The work of the Sanitary Inspectors at different parts of the Port is indicated by the following statement, of the number of vessels inspected and number found with defects at various places along the Canal.

| | | | | | Inspected | Number with Defects |
|-----------------------------------|-----|-----|-----|-----|-----------|------------------------|
| Acton Grange | ... | ... | ... | ... | 22 | 6 |
| Astmoor Marsh (Wigg's Works) | | | | ... | 17 | 7 |
| Barton | ... | ... | ... | ... | 23 | 5 |
| Bowaters' Wharf (Ellesmere Port) | | | | ... | 99 | 38 |
| Davyhulme | ... | ... | ... | ... | 18 | 2 |
| Eastham | ... | ... | ... | ... | — | — |
| Eccles | ... | ... | ... | ... | 3 | — |
| Ellesmere Port | ... | ... | ... | ... | 108 | 29 |
| Irlam | ... | ... | ... | ... | 12 | 4 |
| Irwell Park Wharf and Weaste | | | | ... | 46 | 14 |
| Manchester, Salford and Stretford | | | | ... | 1,234 | 247 |
| Partington | ... | ... | ... | ... | 3 | — |
| Runcorn | ... | ... | ... | ... | 170 | 64 |
| Stanlow Oil Dock and Lay-Bye | | | | ... | 218 | 80 |
| Warrington | ... | ... | ... | ... | 6 | 2 |
| Weston Point | ... | ... | ... | ... | 147 | 66 |
| Widnes | ... | ... | ... | ... | 114 | 36 |
| | | | | | — | — |
| Totals | ... | ... | ... | ... | 2,240 | 600 |
| | | | | | — | — |

Registration countries of the vessels inspected and number found with defects :—

| | | | | | Inspected | Number with Defects |
|-----------------|-----|-----|-----|-----|-----------|---------------------|
| British | ... | ... | ... | ... | 1,422 | 445 |
| American (U.S.) | ... | ... | ... | ... | 117 | 12 |
| Belgian | ... | ... | ... | ... | 7 | 2 |
| Danish | ... | ... | ... | ... | 102 | 14 |
| Dutch | ... | ... | ... | ... | 53 | 8 |
| Egyptian | ... | ... | ... | ... | 3 | — |
| Esthonian | ... | ... | ... | ... | 10 | 5 |
| Finnish | ... | ... | ... | ... | 62 | 12 |
| French | ... | ... | ... | ... | 4 | 1 |
| German | ... | ... | ... | ... | 57 | 3 |
| Greek | ... | ... | ... | ... | 17 | 15 |
| Hungarian | ... | ... | ... | ... | 1 | 1 |
| Italian | ... | ... | ... | ... | 1 | 1 |
| Lithuanian | ... | ... | ... | ... | 3 | 2 |
| Jugo-Slav | ... | ... | ... | ... | 2 | 1 |
| Latvian | ... | ... | ... | ... | 19 | 10 |
| Norwegian | ... | ... | ... | ... | 227 | 49 |
| Panamanian | ... | ... | ... | ... | 1 | — |
| Polish | ... | ... | ... | ... | 2 | — |
| Roumanian | ... | ... | ... | ... | 2 | 2 |
| Russian | ... | ... | ... | ... | 7 | — |
| Swedish | ... | ... | ... | ... | 121 | 17 |
| | | | | | <hr/> | <hr/> |
| Totals | ... | ... | ... | ... | 2,240 | 600 |
| | | | | | <hr/> | <hr/> |

The number of inspections made of British and Foreign vessels and the number found with defects were :—

| | | | | |
|---------|-------------------------------------|-----|-------|-------|
| British | Steamships and Motor Vessels | ... | 1,366 | 428 |
| „ | Sailing Vessels | ... | — | — |
| „ | Flats and Barges | ... | 56 | 17 |
| Foreign | Steamships and Motor Vessels | ... | 818 | 155 |
| „ | Sailing Vessels | ... | — | — |
| | | | <hr/> | <hr/> |
| | Totals | ... | 2,240 | 600 |
| | Revisits | ... | 260 | |
| | Gross Total of Visits and Re-visits | ... | 2,500 | |

In the Manchester Section there was a decrease of 31 inspections from the previous year, and in the Runcorn Section there was a decrease of 68.

**TOTALS OF MONTHLY INSPECTIONS
FOR 1910-37-38.**

| | | | | 1910 (Record Year) | | | 1937 | | | 1938 | | |
|------------------------------|-----|-----|-----|-----------------------|--------------|-------|------|--------------|-------|------|--------------|-------|
| | | | | M/c | Run- corn | Total | M/c | Run- corn | Total | M/c | Run- corn | Total |
| January | ... | ... | ... | 90 | 86 | 176 | 57 | 46 | 103 | 74 | 63 | 137 |
| February | ... | ... | ... | 97 | 110 | 207 | 95 | 66 | 161 | 117 | 56 | 173 |
| March | ... | ... | ... | 111 | 111 | 222 | 107 | 80 | 187 | 102 | 79 | 181 |
| April | ... | ... | ... | 98 | 107 | 205 | 128 | 87 | 215 | 113 | 64 | 177 |
| May | ... | ... | ... | 133 | 149 | 282 | 118 | 94 | 212 | 124 | 94 | 218 |
| June | ... | ... | ... | 121 | 112 | 233 | 104 | 87 | 191 | 106 | 72 | 178 |
| July | ... | ... | ... | 114 | 128 | 242 | 108 | 78 | 186 | 100 | 78 | 178 |
| August | ... | ... | ... | 135 | 129 | 264 | 132 | 64 | 196 | 138 | 75 | 213 |
| September | ... | ... | ... | 107 | 120 | 227 | 98 | 70 | 168 | 91 | 38 | 129 |
| October | ... | ... | ... | 139 | 157 | 296 | 114 | 83 | 197 | 132 | 94 | 226 |
| November | ... | ... | ... | 104 | 100 | 204 | 147 | 97 | 244 | 105 | 78 | 183 |
| December | ... | ... | ... | 176 | 145 | 321 | 164 | 115 | 279 | 139 | 108 | 247 |
| Totals | ... | ... | ... | 1425 | 1454 | 2879 | 1372 | 967 | 2339 | 1341 | 899 | 2240 |
| Increase (+) or Decrease (—) | | | | | | | | | | —31 | —68 | —99 |

FOOD INSPECTION.

LIST OF FOOD IMPORTS.

| Imports | | | | From Foreign Ports | From Coastwise Ports |
|------------------------|-----|-----|-----|---|----------------------|
| Grain, Cereals, &c.— | | | | | |
| Barley | ... | ... | ... | 4,602 tons 93,288 bushels 56,202 bags | 449 bags |
| Groats | ... | ... | ... | 90 bags | 680 bags |
| Maize | ... | ... | ... | 56,007 tons 1,316,381 bushels 12,457 bags | |
| Malt | ... | ... | ... | 2,551 bags | |
| Oats and Oatmeal | ... | ... | ... | 37,644 bushels 5,376 bags | 4,561 bags |
| Wheat | ... | ... | ... | 417,032 tons 3,784,984 bushels 117,454 bags | |
| Wheat Germ | ... | ... | ... | 5,161 bags | 13,789 bags |
| Flour | ... | ... | ... | 117,488 bags | |
| Cornflour | ... | ... | ... | | 38,092 packages |
| Rice | ... | ... | ... | 17,949 packages | 2 bags |
| Ground Rice | ... | ... | ... | 756 bags | 2,357 bags |
| Rice Flour | ... | ... | ... | 453 bags | 292 bags |
| Prepared Cereals | ... | ... | ... | 604,053 packages | 1,788 packages |
| Fruit, &c.— | | | | | |
| Apples | ... | ... | ... | 308,759 packages | 1,149 packages |
| Bilberries | ... | ... | ... | 272 crates | |
| Cranberries | ... | ... | ... | 352 bundles | |
| Grapes | ... | ... | ... | 51 packages | |
| Grapefruit | ... | ... | ... | 6,131 packages | |
| Lemons | ... | ... | ... | 1,065 packages | |
| Limes | ... | ... | ... | 5 crates | |
| Oranges | ... | ... | ... | 278,534 packages | |
| Pears | ... | ... | ... | 6,690 packages | |
| Melons | ... | ... | ... | 17 crates | |
| Wortleberries | ... | ... | ... | 1 case | |
| Fruit Pulp | ... | ... | ... | 7,816 packages | 200 casks |
| Fruit Oils and Essence | ... | ... | ... | 60 cases | |
| Fruit Juice | ... | ... | ... | 1,062 packages | |
| Fruit Jams | ... | ... | ... | 1,672 cases | |
| Fruit Pectin | ... | ... | ... | 13,619 barrels | |
| Fruit in Brine | ... | ... | ... | 3,889 packages | |
| Dried Fruits | ... | ... | ... | 385,654 packages | 20,376 packages |
| Preserved Fruits | ... | ... | ... | 142 casks | 174 cases |

| Imports | | | From Foreign Ports | From Coastwise Ports |
|--------------------------|-----|-----|--------------------|----------------------|
| Tomatoes | ... | ... | 1,158 packages | |
| Vegetables— | | | | |
| Fresh Vegetables | ... | ... | 134,168 packages | 4,433 packages |
| Dried Vegetables | ... | ... | 65,080 packages | 2,996 bags |
| Vegetables in Brine | ... | ... | 4,813 casks | |
| Fish— | | | | |
| Fresh Fish | ... | ... | 43 barrels | |
| Salted Fish | ... | ... | 165 packages | 515 packages |
| Dairy Produce— | | | | |
| Butter | ... | ... | 137,006 packages | |
| Cheese | ... | ... | 37,571 packages | |
| Cream | ... | ... | 17,447 packages | |
| Eggs | ... | ... | 8,071 cases | 486 cases |
| Margarine | ... | ... | 2,647 cases | |
| Condensed Milk | ... | ... | 268,485 packages | |
| Evaporated Milk | ... | ... | 7,750 cases | |
| Malted Milk | ... | ... | 1,496 cases | |
| Milk Powder | ... | ... | 13,846 packages | 441 cases |
| Meat, &c.— | | | | |
| Beef (frozen) | ... | ... | 8,523 crops | |
| | | | 14,545 hinds | |
| | | | 1,794 bags | |
| Beef Sundries (frozen) | ... | ... | 2,749 packages | |
| Boneless Beef | ... | ... | 3,387 bags | |
| Veal (frozen) | ... | ... | 8 sides | |
| | | | 575 bags | |
| | | | 260 packages | |
| Veal Sundries (frozen) | ... | ... | 834 packages | |
| Boneless Veal (frozen) | ... | ... | 860 bags | |
| Boneless Bobby Veal | ... | ... | 85 bags | |
| Pork (frozen) | ... | ... | 932 carcasses | |
| | | | 240 legs | |
| | | | 91 sides | |
| | | | 550 bags | |
| Pork Sundries (frozen) | ... | ... | 5 packages | |
| Lamb (frozen) | ... | ... | 168,395 carcasses | |
| Lamb Sundries (frozen) | ... | ... | 276 bags | |
| Lambs Liver (frozen) | ... | ... | 410 packages | |
| Mutton (frozen) | ... | ... | 54,100 carcasses | |
| Mutton Sundries (frozen) | ... | ... | 277 bags | |
| Kidneys (frozen) | ... | ... | 15 crates | |
| Sweetbreads (frozen) | ... | ... | 5 cartons | |
| Turkeys (frozen) | ... | ... | 250 cases | |

| Imports | | | From Foreign Ports | From Coastwise Ports |
|----------------------------|-----|-----|--------------------|----------------------|
| Live Quails ... | ... | ... | 40 crates | |
| Pig Products ... | ... | ... | 1,541 packages | 22 casks |
| Bacon and Hams ... | ... | ... | 32,368 packages | 46 bales |
| Lard ... | ... | ... | 126,078 tierces | 222 tierces |
| | | | 181,744 boxes | 32 boxes |
| Edible Oils and Fats | | ... | 32,653 tons | |
| | | | 7,614 packages | 147 packages |
| Sugar— | | | | |
| Sugar ... | ... | ... | 931 packages | 14,979 packages |
| Corn Sugar ... | ... | ... | 6,398 packages | 1,840 bags |
| Milk Sugar ... | ... | ... | 50 cases | |
| Corn Syrup and Glucose ... | ... | ... | 6,504 packages | 6,624 packages |
| Cane Syrup ... | ... | ... | 589 packages | 192,991 packages |
| Miscellaneous— | | | | |
| Cocoa Beans ... | ... | ... | 67,200 bags | |
| Cocoa Powder ... | ... | ... | 1,075 packages | 95 cases |
| Coffee... ... | ... | ... | 3,964 packages | 6,094 bags |
| Coffee Essence ... | ... | ... | | 61,094 packages |
| Tea ... | ... | ... | 192,991 packages | 80,742 packages |
| Nuts and Kernels ... | ... | ... | 2,410 packages | 633 bags |
| Condiments ... | ... | ... | 1,149 packages | 1,245 cases |
| Confectionery Commodities | | | 36,876 packages | 241 packages |
| Canned Goods— | | | | |
| Fish ... | ... | ... | 38,764 cases | 8,924 cases |
| Fruits ... | ... | ... | 414,186 cases | 29,536 cases |
| Meats ... | ... | ... | 142,070 cases | 6,478 cases |
| Poultry ... | ... | ... | 151 cases | |
| Soup ... | ... | ... | 51,478 cases | |
| Tomatoes ... | ... | ... | 138,469 cases | 310 cases |
| Tomato Ketchup ... | ... | ... | 40,530 cases | |
| Vegetables ... | ... | ... | 29,324 cases | 51 cases |

FRUIT PULP.

Scottish Raspberry pulp regularly arrives at the Port and on numerous occasions in the past, parcels have been condemned on account of excessive fermentation caused through lack of preservatives. The loss was actually caused by the growers themselves through false economy in using leaky, second hand barrels for the transit of their produce.

The amount of Sulphur-di-Oxide allowed by the Public Health (Preservative in Food) Regulations, is sufficient to preserve fruit pulp almost indefinitely, but being of volatile nature the preservative rapidly escapes unless the container is gas proof. This was pointed out to the local importers, who took up the matter with the packers, with the result that better casks are now provided and happily no condemnation has been necessary this year.

The Dutch packer has for many years recognised the necessity for strong casks and we seldom have any trouble with fruit pulp from this source.

In July, 1938, a consignment of 6 casks of Plum pulp arrived from Ireland. The material was the previous season's produce, packed in very old leaky casks, "washy" in consistency and of repulsive appearance, with a total absence of whole fruit and a strong odour of alcohol and acetic acid.

Your Inspector judged that the preservative having escaped, allowed fermentation to proceed and to such an extent as to destroy the food value of the produce. Subsequent chemical analysis proved this conjecture to be correct.

Your Medical Officer had difficulty in satisfying the owners that "fruit pulp" in this condition is unfit for food and refused their offer to make a sample into jam, on the grounds that such a procedure could not be justified. It was felt that the consumer should be protected against the manufacture of jam from a produce which showed such evidence of fermentation and the material was subsequently destroyed.

In September, 1938, a consignment of 230 cases of Black Cherry pulp, each case containing ten 10 lb. tins, arrived from the Continent.

The cases were loaded to railway wagons for transit to H. M. Customs Bond in a neighbouring locality. Ten clean and 45 stained cases were inspected on the quay in the presence of the manufacturers and 27 burst and blown tins were rejected.

It was quite evident that the fruit had been badly processed and to avoid further loss the Inspector urged immediate jamming of the contents of the apparently sound tins, but the manufacturer preferred to take the risk and send the parcel into Bond pending discussion as to import duty. As the consignment could still be kept under supervision permission was given to transfer the goods into Bond. The cases examined and found sound along with burst and blown tins were left on the shed for a further 48 hours and during that period other tins, apparently sound, became blown and some of the blown tins had bursted. Some idea of the tremendous pressure in the blown tins may be judged by the fact that the lid of one tin smashed a heavy glass skylight in the roof of the shed 60 feet high.

The Authorities of the district to which the remainder of the consignment had been sent, were advised of this development and further inspection of the parcel was made at the Warehouse, 64 unsound tins were condemned.

After release from Bond to a Jam Factory in another area, a further examination was made and more defective tins were destroyed by the Local Authority.

CANNED FRUIT.

On June 2nd, 1938, a consignment of 50 cases of canned Bilberries arrived from Hamburg, and it was evident that a number of defective tins were present. A full examination resulted in 102 tins being rejected of which 84 were leaking. A contention was advanced by the consignee that the latter tins were fit for immediate use, but your Medical Officer could not agree to this, and the whole of the tins were destroyed.

Reference was made in my Report for 1937, to the liability to damage of tins packed in cardboard containers. In one case during 1938, 64 6 lb. tins of Tomato Puree had to be condemned owing to the tins being punctured by collapse of such packages.

CANNED MEATS.

A very high standard has now been reached in the canning of foods and it is unusual nowadays to find during routine examinations more than odd tins of unsound canned meats, but in July 11 blown tins were found on examination of 3 cases of Danish Jellied Veal. A full examination was made of the whole consignment, consisting of 50 cases, and 38 tins were rejected. The parcel was consigned to a Manchester firm, and the City Authorities were advised of the circumstances.

In September, a further instance of this nature occurred. Preliminary examinations of 7 cases from a consignment of 233 cases of Ox Tongues revealed 10 blown or burst tins and 19 similar tins from 7 cases in a consignment of 61 cases of Brisket Beef, canned by the same packers. A full examination of both lots was made, and 48 tins of Brisket Beef and 57 tins of the Ox Tongues rejected. Samples of the apparently sound tins were forwarded to the Public Health Laboratory, and the contents were found to be sterile.

ABSENCE OF OFFICIAL CERTIFICATES.

On June 24th, 5 bales of Hams arrived from Amsterdam without the Official Certificates attached to the packages. The hams had an Inspection stamp on the skins, but owing to the natural moisture exuding from this class of meat, such were not legible. The attention of the Ministry of Health was drawn to the matter.

On August 9th, 2 boxes of Hams from U.S.A. were found without inspection labels. The hams themselves were, however, very clearly marked with the official brand.

An unusual instance occurred in November in connection with a consignment of 200 tierces of American Lard. The practice here is to load these casks direct to rail wagons for conveyance to the consignees' works, only a small percentage of each particular mark being landed to the quay for inspection purposes. In this instance 5 casks on the quay were found to have no official certificates present, and an examination of those loaded into wagons showed a similar state of affairs. The consignees were advised of this and requested to keep on one side any casks received at the Works. Later in the day two casks were landed with

inspection labels attached, and on a search of the ship's hold a number of detached certificates bearing corresponding serial inspection numbers were found. The consignees reported the following morning that 125 casks had been received without inspection labels attached. It was apparent that the adhesive used was not of usual character, and the natural dampness of the ship's hold had caused the labels to come away from the casks. Your Medical Officer agreed to the use of the lard, but advised the receivers that a stronger type of adhesive should be used in future.

UNCERTIFIED SAUSAGE CASINGS.

Since the amendment of the Imported Food Regulations requiring sausage casings to have an Official certificate attached to the containers after April 1st, the following instances of consignments arriving without official certificates were found :—

| Date | From | | Amount | Action taken |
|---------|-----------|--------|---------|---------------------|
| Apl. 27 | Rotterdam | ... .. | 2 casks | Re-exported Apl. 29 |
| May 12 | New York | ... .. | 1 cask | „ May 19 |
| July 15 | New York | ... .. | 1 cask | „ July 16 |
| 20 | New York | ... .. | 2 casks | „ Aug. 4 |

In the following cases “Inedible” casings were imported for the manufacture of “machine gut bands.” In all cases guarantees as to disposal, as required by the Regulations, were obtained from the actual users before release.

| Date | From | Amount |
|---------|----------------|-------------|
| Apl. 16 | ... Copenhagen | ... 3 casks |
| May 10 | ... Copenhagen | ... 2 casks |
| June 2 | ... Copenhagen | ... 1 cask |
| July 18 | ... Copenhagen | ... 1 cask |
| Aug. 9 | ... Copenhagen | ... 1 cask |
| Sept. 7 | ... Copenhagen | ... 2 casks |
| Oct. 5 | ... Copenhagen | ... 2 casks |

EVAPORATED MILK.

During the early part of the year we were requested by a Warehousing Co. to destroy 26 cases of evaporated milk which had been abstracted from a parcel of New Zealand origin and imported through Manchester a few months previously.

As the consignment had been subjected to inspection on arrival and found to be sound, the request to destroy created interest and at our suggestion the firm kindly sent a few cases to the offices for examination. The milk was certainly unsound, some of the tins were badly blown, the contents of others were found to be thick or cheesy, and all were putrid. Shortly afterwards a consignment of 1,500 cases arrived and a full examination was made of 25 cases in which were found 13 blown tins and 2 tins with thick cheesy content. Discovery of the unsound tins proved defective

sterilisation during the canning process and a further investigation and enquiries showed that the milk would not keep good for a reasonable period, but rapidly deteriorated during storage. Full examination of all cases had to be made before delivery. The matter was taken up by the importers and improved methods of canning were adopted.

CASEOUS LYMPHADENITIS.

Our rejections on account of this disease have been confined to lamb carcasses, in many of which typical lesions of the disease have been absent. The lymphatic glands in the carcasses condemned were abnormal in colour, usually a nasty green and altogether unsightly. Examination of sections from three carcasses was carried out at the Public Health Laboratory and the diagnosis was confirmed, the condition being reported as in an early stage of the disease.

BONELESS BOBBY VEAL.

This class of meat, which is imported for the purpose of canning, can only be superficially inspected at the port, but your inspectors took the opportunity during a visit to a canning factory in the locality arranged by the Sanitary Inspectors Association to make an extensive examination after thawing of a consignment recently imported through Manchester and they were very well pleased with the quality of the meat.

RAT CONTAMINATED FOODS.

The following instances of foods being damaged by rats were noted.

On June 17th a consignment of Egyptian Onions in bags were inspected, and in one bag a rat nest was found.

On July 19th a case of Desiccated Cocoanut from Colombo was found to be contaminated.

On December 28th, 38 crates of fresh Tomatoes arrived from Egypt, and 10 packages were found to be rat eaten. This consignment had been carried on deck, and rats had been nesting amongst the packages during the voyage.

In all these cases the damaged packages were re-conditioned, all contaminated portions being removed. The attention of the Sanitary Inspectors was called to the evidence of the rat infestation.

DAMAGED GRAIN.

On August 9th a large amount of damaged wheat was found on the s.s. "Appledore," from Australia. During her passage up the Canal the vessel struck a wharf, resulting in a leakage into one of the holds. A total of 722 tons was ultimately discharged, and on application of the owners was allowed to go to Liverpool for treatment and drying under the supervision of the Liverpool Port Health Authority, for conversion into animal foods.

IMPORTED MEAT.
CASEOUS LYMPHADENITIS.

| Year | No. of Carcases, etc., Imported | From | No. Inspected | No. Condemned | Percentage Condemned to Number Inspected |
|------|---------------------------------------|---------------|----------------------------|---|--|
| 1934 | 18,636 Lamb 3,663 Mutton | } New Zealand | { 563 115 | None | None |
| | 149,656 Lamb | | | | |
| | 36,338 Mutton 554 Mutton Parts | } Australia | { 915 — | { 9 Caseous Lympha- denitis 1 Brine- Damaged None — | 0·176% — None — |
| | | | | | |
| 1935 | 67,359 Lamb 2,636 Mutton | } New Zealand | { 3,521 156 | { 8 Caseous Lympha- denitis | 0·217% |
| | 76,814 Lamb 28,139 Mutton | | | | |
| | 30 Cases Mutton Joints | } Australia | { 3,225 565 30 Cases | { 3 Caseous Lympha- denitis — | 0·079% — |
| 1936 | 39,979 Lamb 3,201 Mutton | | | | |
| | 66,633 Lamb 6,129 Mutton | } Australia | { 3,530 273 | 1 Caseous Lympha- denitis (Lamb) | 0·0283% |
| 1937 | 22,879 Lamb 2,875 Mutton | | | | |
| | 109,385 Lamb 53,693 Mutton | } Australia | { 5,782 1,804 | 5 Caseous Lympha- denitis (Lamb) | 0·0864% |
| 1938 | 62,356 Lamb 3,660 Mutton | | | | |
| | 106,039 Lamb 50,440 Mutton | } Australia | { 5,587 1,717 | 9 Caseous Lympha- denitis (Lamb) | 0·1232% |

(1) Action taken under the Public Health (Imported Food) Regulations, 1925, the Public Health (Imported Food) Amendment Regulations, 1933, the Public Health (Imported Food) Regulations, 1937, the Public Health (Imported Milk) Regulations, 1926, and the Public Health (Preservatives, &c., in Food) Regulations, 1925 to 1927.

RESULTS OF INSPECTION.

Amounts of Food Imports which have been condemned during the year.

Seizures on the Various Dock Quays.

| Articles | | | | | | | Weight | | | |
|------------------------------|-----|-----|-----|-----|-----|-----|--------|----|----|------|
| Grain, Cereals, &c.— | | | | | | | T. | c. | q. | lbs. |
| Barley | ... | ... | ... | ... | ... | ... | 5 | 12 | 0 | 0 |
| Flour | ... | ... | ... | ... | ... | ... | 5 | 5 | 0 | 24 |
| Maize | ... | ... | ... | ... | ... | ... | 34 | 15 | 0 | 0 |
| Rice | ... | ... | ... | ... | ... | ... | | | 3 | 16 |
| Rolled Oats | ... | ... | ... | ... | ... | ... | | | 1 | 26 |
| Wheat Germ. | ... | ... | ... | ... | ... | ... | 17 | 19 | 0 | 24 |
| Wheat | ... | ... | ... | ... | ... | ... | 811 | 5 | 3 | 9 |
| Fruit and Vegetables— | | | | | | | | | | |
| Apples | ... | ... | ... | ... | ... | ... | 3 | 19 | 2 | 0 |
| Dried Fruits | ... | ... | ... | ... | ... | ... | | 19 | 2 | 2 |
| Oranges | ... | ... | ... | ... | ... | ... | 11 | 7 | 0 | 0 |
| Tinned Foods— | | | | | | | | | | |
| Fish | ... | ... | ... | ... | ... | ... | | | | 1 |
| Fruits | ... | ... | ... | ... | ... | ... | | 16 | 2 | 15 |
| Meats | ... | ... | ... | ... | ... | ... | | 8 | 0 | 27 |
| Milk | ... | ... | ... | ... | ... | ... | | | | 20 |
| Vegetables | ... | ... | ... | ... | ... | ... | | | | 1 |
| Tomatoes | ... | ... | ... | ... | ... | ... | | 1 | 0 | 0 |
| Meat— | | | | | | | | | | |
| Lamb (Frozen) (21 carcasses) | ... | ... | ... | ... | ... | ... | | 5 | 3 | 15 |

Seizures on the Various Docks Quays—*continued*.

| Articles | | | | | | Weight | | | |
|---------------------|-----|-----|-----|-----|-----|--------|----|----|------|
| Miscellaneous— | | | | | | T. | c. | q. | lbs. |
| Desiccated Cocoanut | ... | ... | ... | ... | ... | | | | 1 |
| Fruit Pectin | ... | ... | ... | ... | ... | | 2 | 1 | 0 |
| Fruit Pulp | ... | ... | ... | ... | ... | 1 | 5 | 1 | 18 |
| Tomato Catsup | ... | ... | ... | ... | ... | | | 2 | 24 |
| „ Extract | ... | ... | ... | ... | ... | | | | 20 |
| „ Puree | ... | ... | ... | ... | ... | | 7 | 0 | 25 |
| Lard | ... | ... | ... | ... | ... | 2 | 9 | 3 | 27 |
| Sausage Filling | ... | ... | ... | ... | ... | | 1 | 0 | 0 |
| Total | | | | | | 897 | 3 | 1 | 15 |

In addition, the following articles were voluntarily
surrendered for destruction :—

| | | | | | | T. | c. | q. | lbs. |
|-------------------|-----|-----|-----|-----|-----|-----|----|----|------|
| Canned Vegetables | ... | ... | ... | ... | ... | | | | 12 |
| Canned Fruits | ... | ... | ... | ... | ... | | 3 | 1 | 16 |
| Canned Meats | ... | ... | ... | ... | ... | | 4 | 1 | 9 |
| Canned Milk | ... | ... | ... | ... | ... | | 13 | 0 | 9 |
| Canned Tomatoes | ... | ... | ... | ... | ... | | 4 | 1 | 25 |
| Oranges | ... | ... | ... | ... | ... | 9 | 10 | 0 | 0 |
| Rice Crispies | ... | ... | ... | ... | ... | | | 1 | 8 |
| Total | | | | | | 10 | 15 | 2 | 23 |
| Gross Total | | | | | | 907 | 19 | 0 | 10 |

(2) Shell-Fish.—There are no shell-fish beds or layings within the jurisdiction of the Authority.

LABORATORY EXAMINATIONS.

(3) Number of samples of food examined by :—

(a) Bacteriologist.

(b) Analyst.

Samples for examination forwarded to the Manchester City Analyst and the University of Manchester Department of Bacteriology and Preventive Medicine.

| Nature of Sample | Object of Examination | Result |
|----------------------------------|-------------------------------------|--|
| Sardines (Canned) | Presence of metallic contamination. | Less than 2 parts of lead per 1,000,000 |
| do. | do. | Less than 4 parts of lead per 1,000,000 |
| do. | do. | Less than 2 parts of lead per 1,000,000 |
| do. | do. | Less than 3 parts of lead per 1,000,000 |
| do. | do. | 14 parts of lead per 1,000,000 |
| Tomato Extract | do. | 37 parts of copper per 1,000,000 |
| do. | do. | 20 parts of copper per 1,000,000 |
| Tomato Puree | do. | 7 parts of copper per 1,000,000 |
| Tomato Catsup | do. | 6 parts of copper per 1,000,000 |
| Tomatoes | do. | 4 parts of copper per 1,000,000 |
| do. | do. | 1 part of copper per 1,000,000 |
| do. | do. | 1 part of copper per 1,000,000 |
| do. | do. | 2 parts of copper per 1,000,000 |
| Apricot Pulp | do. | 60 parts of tin per 1,000,000 |
| Condensed Milk | do. | Less than $\frac{1}{3}$ grain of tin per lb. |
| Lymphatic Glands (portions of 3) | Caseous Lymphadenitis | Confirmed. Carcases destroyed. |
| Ox Tongue (Canned) | Evidence of Unsoundness | Not confirmed. |
| Beef (Canned) | do. | do. |
| Ham | Amount of Preservatives | Negative. |
| Spinach | do. | Negative |
| Pectin Powder | do. | Negative |
| Plum Pulp | do. | 460 parts of SO ₂ per 1,000,000 |
| do. | do. | 468 parts of SO ₂ per 1,000,000 |
| Strawberry Pulp | do. | 1,920 parts SO ₂ per 1,000,000 |
| Fruit Pectin | do. | 1/20th of 1 grain arsenic per gallon |
| do. | do. | 1/25th do. |
| Orange Bed Base | do. | 896 parts SO ₂ per 1,000,000 |
| Grape Fruit Pulp | do. | 800 parts SO ₂ per 1,000,000 |
| Juice | | |

REPORT ON THE ADMINISTRATION OF THE CANAL BOATS ACTS, 1877-84.

For the Year ended 31st December, 1938.

(1) The following Inspectors have been appointed by the Authority to carry out the provision of the Canal Boats Acts, viz. :—

William Schofield, }
William H. Jennings, } for Section A (Manchester to Latchford).

Walter Richmond, for Section B (Latchford to Eastham).

No Inspector devotes his whole time to the duties of inspection under the Canal Boats Acts. For the purposes of administration, the Port is divided into two sections, viz. :—From Eastham to Latchford, including Widnes and Warrington, with headquarters at Runcorn, and from Latchford to Manchester, with headquarters at Manchester. Each section is under the control of an Inspector, who is directly and solely responsible to the Medical Officer of Health for the proper supervision of his district.

A motor boat is in daily use on the lower reaches of the canal, and this enables the Inspector to keep under constant supervision canal boats using the Port at various points.

(2) During the year there has been an increase of 139 inspections compared with those of the previous year. On the Runcorn section of the canal 479 inspections were made, and on the Manchester section 176 inspections were made.

| Individual No. of Canal Boats Inspected during 1938 | No. of Inspections made | Average No. of Inspections per boat | Individual No. of boats defective | Percentage of boats defective to number Inspected | Number of defective boats reported remedied |
|---|-------------------------------|--|--|---|---|
| 349 | 655 | 1.89 | 100 | 28.65% | 80 |

INSPECTION OF CANAL BOATS.

| Year | | Number of Inspections | | Number of Boats with Defects | | Percentage Defective |
|------|-------|--------------------------|-------|------------------------------------|-------|-------------------------|
| 1938 | ..... | 655 | ..... | 106 | ..... | 16·18 |
| 1937 | ..... | 516 | ..... | 99 | ..... | 19·18 |

Since the Authority undertook this duty in 1903 the percentage of canal boats found to be defective has very considerably diminished. In the year 1907, 65 per cent. were found defective ; in 1917 the percentage was 28 and in 1927 this was reduced to 25 per cent. The figure of 14·26 per cent. for the year 1933 was the lowest on record, and for the year 1938 the percentage was 16·18.

(3) The following is a summary of the defective conditions and contraventions of the Canal Boats Acts found during the year :—

(a) Registration.

| | | | | | | |
|------------------------|-----|-----|-----|-----|-----|---|
| Registration incorrect | ... | ... | ... | ... | ... | 3 |
|------------------------|-----|-----|-----|-----|-----|---|

| | | | | |
|--------------------------------------|-----|-----|-----|---|
| (b) Notification of Change of Master | ... | ... | ... | 0 |
|--------------------------------------|-----|-----|-----|---|

(c) Certificates.

| | | | | |
|---------------------------------|-----|-----|-----|----|
| Registration certificate absent | ... | ... | ... | 17 |
|---------------------------------|-----|-----|-----|----|

| | | | | |
|--------------------------------------|-----|-----|-----|---|
| Registration certificate dilapidated | ... | ... | ... | 6 |
|--------------------------------------|-----|-----|-----|---|

(d) Marking.

| | | | | | |
|----------|-----|-----|-----|-----|---|
| No marks | ... | ... | ... | ... | 2 |
|----------|-----|-----|-----|-----|---|

| | | | | |
|---------------------------------|-----|-----|-----|---|
| Marking indistinct or incorrect | ... | ... | ... | 7 |
|---------------------------------|-----|-----|-----|---|

| | | | | | |
|------------------|-----|-----|-----|-----|----|
| (e) Overcrowding | ... | ... | ... | ... | 12 |
|------------------|-----|-----|-----|-----|----|

| | | | | | |
|-----------------------------------|-----|-----|-----|-----|---|
| (f) Separation of Sexes (want of) | ... | ... | ... | ... | 0 |
|-----------------------------------|-----|-----|-----|-----|---|

(g) Cleanliness and Repairs.

| | | | | | |
|------------------------------|-----|-----|-----|-----|---|
| Cleansing of cabins required | ... | ... | ... | ... | 6 |
|------------------------------|-----|-----|-----|-----|---|

| | | | | |
|--|-----|-----|-----|----|
| Cabins, etc., dilapidated and repairs required | ... | ... | ... | 12 |
|--|-----|-----|-----|----|

| | | | | |
|--|-----|-----|-----|----|
| Miscellaneous leakages into cabins, etc. | ... | ... | ... | 40 |
|--|-----|-----|-----|----|

| | | | | | |
|---|-----|-----|-----|-----|---|
| Bulkheads defective allowing communication with holds | ... | ... | ... | ... | 0 |
|---|-----|-----|-----|-----|---|

| | | | | | |
|-----------------------------|-----|-----|-----|-----|----|
| Defective Stove Pipes, etc. | ... | ... | ... | ... | 11 |
|-----------------------------|-----|-----|-----|-----|----|

| | | | | | |
|--------------------------------|-----|-----|-----|-----|---|
| Food Lockers require repairing | ... | ... | ... | ... | 3 |
|--------------------------------|-----|-----|-----|-----|---|

| | | | | | |
|----------------------|-----|-----|-----|-----|---|
| Infested with vermin | ... | ... | ... | ... | 6 |
|----------------------|-----|-----|-----|-----|---|

| | | | | | |
|------------------------------|-----|-----|-----|-----|---|
| Bed-berth requires repairing | ... | ... | ... | ... | 1 |
|------------------------------|-----|-----|-----|-----|---|

(h) Ventilation and Lighting.

| | | |
|---|--------|---|
| Ventilation inefficient and ventilators defective | ... | 1 |
| Insufficient lighting | ... .. | 0 |

(i) Painting.

| | | |
|---|-----|----|
| Cabins, lockers, berths, etc., requiring painting | ... | 29 |
|---|-----|----|

(j) Provision of Water Cask.

| | | |
|---|--------|---|
| No water vessel or vessel not of sufficient capacity | ... | 1 |
| Water casks decayed and water vessels requiring repairs or renewing | ... .. | 9 |
| Water vessels in a tainted condition | ... .. | 0 |

(k) Removal of Bilge Water.

| | | |
|----------------------------|--------|---|
| Bilge Pumps absent | ... .. | 0 |
| Bilge Pumps defective | ... .. | 2 |
| Bilges requiring cleansing | ... .. | 0 |

(l) Notification of Infectious Disease

| | | |
|-----|-----|---|
| ... | ... | 0 |
|-----|-----|---|

(m) Admittance of Inspector

| | |
|--------|---|
| | 0 |
|--------|---|

(n) Entrance to Bed-berth placed under cabin scuttle

| | |
|-----|---|
| ... | 1 |
|-----|---|

| | | |
|-------|--------|-----|
| Total | | 169 |
|-------|--------|-----|

(4) The usual steps have been taken to secure compliance with the Acts. In all cases complaint notes have been promptly served upon the owners. No legal proceedings have been necessary to obtain the remedy of defects.

(5) No cases of Infectious Disease have been notified on canal boats during the year.

(6) No boats have been detained for cleansing or disinfection.

(7) The Authority is not a Registration Authority.

